

(19) World Intellectual Property Organization
International Bureau



507,194
Rec'd PCT/PTO 09 SEP 2004

(43) International Publication Date
18 September 2003 (18.09.2003)

PCT

(10) International Publication Number
WO 03/077234 A1

(51) International Patent Classification⁷: **G10L 15/18**

(21) International Application Number: **PCT/IB03/00890**

(22) International Filing Date: 10 March 2003 (10.03.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
102 11 777.2 14 March 2002 (14.03.2002) DE

(71) Applicant (for DE only): **PHILIPS INTELLECTUAL PROPERTY & STANDARDS GMBH** [DE/DE]; Stein-
damm 94, 20099 Hamburg (DE).

(71) Applicant (for all designated States except DE, US):
KONINKLIJKE PHILIPS ELECTRONICS N.V.
[NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven
(NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PANKERT,**

Matthias [BE/DE]; c/o Philips Intellectual Property
& Standards GmbH, Weissshausstr. 2, 52066 Aachen
(DE). **SCHMALD, Reimund** [DE/DE]; c/o Philips In-
tellectual Property & Standards GmbH, Weissshausstr. 2,
52066 Aachen (DE). **MARSCHNER, Jens, Friedemann**
[DE/DE]; c/o Philips Intellectual Property & Standards
GmbH, Weissshausstr. 2, 52066 Aachen (DE).

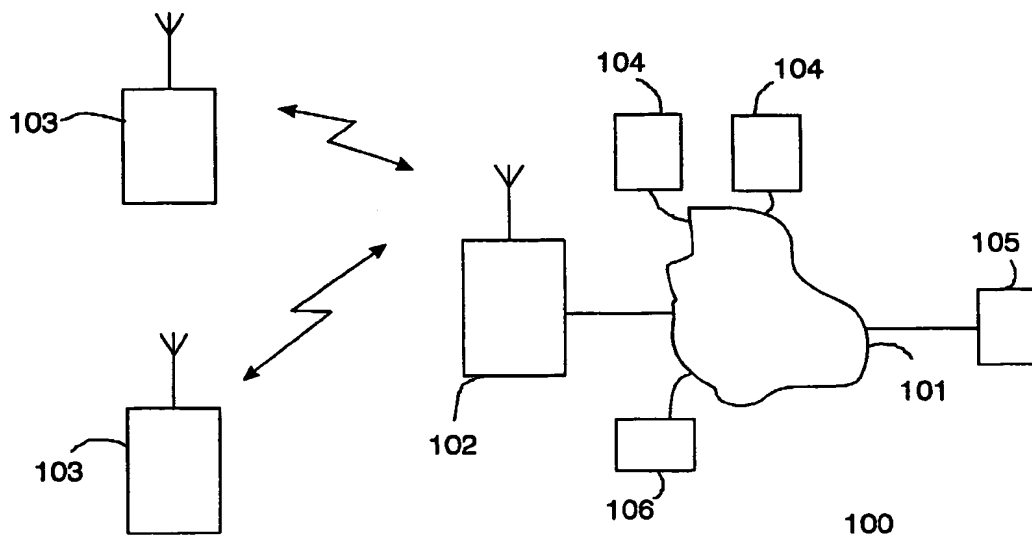
(74) Agent: **VOLMER, Georg**; Philips Intellectual Property &
Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: **TEXT MESSAGE GENERATION**



(57) Abstract: The invention relates to a method of generating text messages. In order to make the generation of text messages as convenient and efficient as possible for a user, the following steps are proposed: - processing of speech input containing message elements by means of grammar-based speech recognition procedures; - processing of speech input by means of speech model-based speech recognition procedures, either in parallel with processing by means of grammar-based speech recognition or once a recognition result has been obtained by means of the grammar-based speech recognition procedures which is not of a predefined quality; - generation of a text message using the recognition results produced by means of the grammar-based and/or speech model-based speech recognition procedures.

WO 03/077234 A1



European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

 Internat. Application No
 PCT/IB 03/00890

 A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G10L15/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G10L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, IBM-TDB, PAJ, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01 41125 A (DELAUNAY CHRISTOPHE ; SOUFFLET FREDERIC (FR); THOMSON MULTIMEDIA SA) 7 June 2001 (2001-06-07)	1,7-10
A	page 5, line 22 - page 8, line 14; figure 2	2-6
X	WO 00 14727 A (WEBER DEAN C ; ONE VOICE TECHNOLOGIES INC (US))	1-4,7-10
A	16 March 2000 (2000-03-16)	5,6
	page 4, line 19 - line 27; figure 3A	
	page 5, line 17 - line 21	
	page 7, line 14 - page 11, line 28	
	page 17, line 20 - line 32	

	-/-	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

28 July 2003

Date of mailing of the international search report

04/08/2003

Name and mailing address of the ISA

 European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax (+31-70) 340-3016

Authorized officer

De Vos, L

INTERNATIONAL SEARCH REPORT

Internat | Application No
PCT/IB 03/00890

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>TONITA M: "AN EFFICIENT WORD LATTICE PARSING ALGORITHM FOR CONTINUOUS SPEECH RECOGNITION" INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH & SIGNAL PROCESSING. ICASSP. TOKYO, APRIL 7 - 11, 1986, NEW YORK, IEEE, US, vol. 3 CONF. 11, 7 April 1986 (1986-04-07), pages 1569-1572, XP001028454 abstract; figures 2.1, 4.1-4.9 paragraphs '02.1!', '0004!</p>	5, 6
X	<p>EP 1 079 615 A (MATSUSHITA ELECTRIC IND CO LTD) 28 February 2001 (2001-02-28) paragraphs '0022!', '0043!'-'0045!; figure 4</p>	5-7
X	<p>US 6 266 634 B1 (GIANCARLO RAFFAELE ET AL) 24 July 2001 (2001-07-24) column 5, line 10 - line 16</p>	5

INTERNATIONAL SEARCH REPORT

 International Application No
 PCT/IB 03/00890

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0141125	A	07-06-2001	AU 2180001 A	12-06-2001
			CN 1402867 T	12-03-2003
			EP 1236198 A1	04-09-2002
			WO 0141125 A1	07-06-2001
			JP 2003515777 T	07-05-2003
			US 2003105633 A1	05-06-2003
WO 0014727	A	16-03-2000	US 6499013 B1	24-12-2002
			AU 762282 B2	19-06-2003
			AU 5813099 A	27-03-2000
			AU 6243999 A	27-03-2000
			CA 2343150 A1	16-03-2000
			CA 2343229 A1	16-03-2000
			CN 1325527 T	05-12-2001
			CN 1325528 T	05-12-2001
			EP 1110206 A1	27-06-2001
			EP 1110205 A1	27-06-2001
			JP 2002524776 T	06-08-2002
			JP 2002524806 T	06-08-2002
			WO 0014727 A1	16-03-2000
			WO 0014728 A1	16-03-2000
			US 6532444 B1	11-03-2003
			US 6434524 B1	13-08-2002
EP 1079615	A	28-02-2001	US 6415257 B1	02-07-2002
			US 6324512 B1	27-11-2001
			EP 1079615 A2	28-02-2001
			JP 2001142481 A	25-05-2001
US 6266634	B1	24-07-2001	US 6073098 A	06-06-2000